

Best Practices in Access Control and Security Cameras for Women's Fraternity National
Housing Corporations

A Capstone Project Report

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Ellen Elizabeth Apple White

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COMMITTEE MEMBER	APPROVAL SIGNATURE	DATE
Veto Ray, Co-Chair <i>Facilities Management Technology</i>	_____	_____
David Goodman, Co-Chair <i>Electrical and Computer Engineering Technology</i>	_____	_____
Elaine Cooney, Member <i>Electrical and Computer Engineering Technology</i>	_____	_____

ABSTRACT

Greek housing is a small niche of the housing industry and safety is a standard assurance provided by the local or national housing corporations that manage the multi-million-dollar assets on campuses across the nation. Unfortunately, the national housing corporations are young companies growing exponentially. This industry provides great opportunities for growing professionals to make an impact on the future by establishing best practices that have not yet been created.

Women's Greek organizations and housing corporations are particularly resolute in establishing and providing safe living environments for young women in their communities. These facilities prioritize safety and security, however, there are few best practices in the industry for access control and security cameras.

Many of these facilities are older with outdated systems. There are countless options for these corporations to update their most important aspects of the facility, access control, and security cameras. However, selecting the best option of the countless options can be a daunting task.

The deliverable of this project was a toolkit of information for Local and National Housing Corporations to use when exploring upgrading access control and security cameras. It includes need assessments and worksheets; specifications and location need and guidance on implementation plans including training and installation. This also takes the size, occupancy, and staff of as well as the cost of the recommended system into consideration.

Keywords: Greek housing, sorority house, safety, access control, security cameras

INTRODUCTION

Greek life was first established on college campuses in 1776 by the men's fraternity, Phi Beta Kappa as an alternative to other prestigious on-campus membership societies. The Greek organizations were created for members to gather and discuss subjects not covered in the classroom with other likeminded members establishing a code of high principles and morals (New World Encyclopedia, n.d.).

Some men's fraternities are age-old institutions with a history spanning almost 250 years however, the first women's Greek organization was not established until 1851 by Alpha Delta Pi at Wesleyan Female College (Alpha Delta Pi, n.d.). These women-only organizations are commonly referred to as sororities or women's fraternities. There are many different types of fraternities and sororities including service, professional, honorary, and social.

Often members of these social Greek organizations reside in a facility together to capitalize on their Greek experience. The first fraternity house is credited to Chi Psi Fraternity at the University of Michigan in 1845 (New World Encyclopedia, n.d.). These multi-million-dollar facilities have traditionally been managed by a small volunteer group of local alumni. These alumni typically have other occupations and little property management experience.

The Alpha Phi women's fraternity is credited for building the first fraternity house for women in 1884 at Syracuse University (Alpha Phi, n.d.). Zeta Tau Alpha is the first women's organization to create a national housing corporation in 1977, reallocating the upkeep and responsibility of the multi-million-dollar assets across the nation from local

alumnae to the paid staff members of the organization's national headquarters (Zeta Tau Alpha, n.d.).

Since 1977, 17 of the 26 women's social fraternities and sororities who participate in the National Panhellenic Conference (NPC) have followed Zeta Tau Alpha's lead and established National Housing Corporations to further their organization's mission by maintaining the organizations largest assets by paid professionals. Many of these national housing corporations are much younger than Zeta Tau Alpha's. Some are just getting established and are less than five years old, with the majority being between 10 and 15 years old (Alpha Omicron Pi, n.d.) (Kappa Alpha Theta, n.d.).

In addition to the women's organization's realization of the significant financial assets tied to the facilities, the organizations also realized the facilities were also an ideal marketing tool. As the popularity of modern, luxury amenities increased on college campuses, Greek organizations had to follow suit and in turn marketed their renovations, finishes, and amenities to their membership. In addition to the physical properties, the organizations began to sell "the experience" of living in a chapter house with your sisters.

Almost every National Housing Corporation has two things in common. First, selling the sisterhood by commonly using "how many times in your life will you be able to live with over 50 of your closest friends?" or "a unique opportunity for members to strengthen their bond with their fellow sisters." Second is the promise of safety in these facilities. The National Housing Corporations for Alpha Chi Omega, Alpha Gamma

Delta, Zeta Tau Alpha, Sigma Kappa, and Alpha Phi, to name just a few, all mention their interpretation of the pledge of "safe facilities" on their housing websites.

This project focuses on the safety of women's social fraternity and sorority housing. More specifically the implementation of updated access control systems and security cameras.

PROBLEM STATEMENT

To meet the National Housing Corporations' organizational assurances of safety and security, best practices need to be established for the unique niche within collegiate housing, women's fraternities and sororities, on campuses across the nation.

SIGNIFICANCE

Many National Housing Corporations for women's social Greek organizations are very young companies managing millions of dollars in assets. Additionally, the services and facilities are exceptionally unique. It is common in community living, such as apartments or university residence halls, to have a club house or a resident gym, however, a resident would never have access to another resident's apartment. In Greek houses, that is the case. There are few access controls within the facility itself. There is an absence of industry standards and best practices for this niche of housing due to the relatively young age of the industry and the lack of disclosing company practices due to the traditional nature of secrecy among Greek organization culture. Traditionally, the Greek community tends to never share organization's secrets and unfortunately that mentality bled over into National Housing Corporations.

Establishing best practices can be a daunting task however, by starting with access control and security camera standards based on size, occupancy, and location of the facility, this is another step toward open communication among National Housing Corporations and learning from other organization's mistakes and successes.

NICHE PROPERTY MANAGEMENT

Property management is a multi-billion-dollar industry according to iPropertyManagement.com with services ranging from fee collection to cleaning and maintenance to bookkeeping (Bustamante, n.d.). Greek organizations make up a small percentage of the industry tackling all the same services as a commercial or residential property management company would face and, in some cases, more!

Unfortunately, there is not a lot of guidance for this specific niche of housing and property management. It presents exclusive obstacles that are not typically found in one facility. Those obstacles include the type of housing. The largest facilities on a national housing corporation's portfolio could be a 45,000 square foot commercial home. This facility should act as a home with the durability of a commercial facility. That is a hard balance to strike! Another obstacle is the cliental. For other property management companies, their objective is to sell units but for a National Housing Corporation, their target audience is exceptionally small, only containing undergraduate members of their organization on the specific campus the facility is located. With a plethora of new, attractive apartments coming onto the market each year, it is a challenge to obtain full occupancy year over year in Greek housing. Additionally, since the facility is a "home-like" atmosphere, all have common spaces for every member's use as well as a personal space that acts much like a bedroom or dayroom traditionally shared with a

few other members. These spaces typically go unlocked and the trust system is used to keep belongings safe and since the facility is open to the entire membership, there is a sense of lack of privacy.

To continue to be an attractive housing solution for undergraduate members, the National Housing Corporations must appeal to the member and her family. One benefit these unique facilities can offer that many others cannot is a safe, family-like environment living with other people who care about the complete wellbeing of the resident. Additionally, these facilities often times have an on-site staff member, cleaning services and meal program.

CAMPUS SAFETY

National Housing Corporations are obligated to fulfill their promise for safety in their facilities and, while there are some guidelines in place such as restrictions on access control and guest policies, the organizations need to continue to develop and improve their safety practices. Sitting idle is not an option for property management companies on college campuses.

The Bureau of Justice Statistics shares that men experience a higher frequency of victimization for all types of violent crime excluding rape and sexual assault (Rachel E. Morgan, 2019). Unfortunately, a factor that contributes to an increased likelihood of sexual assault is sorority membership (National Institute of Justice, 2008). This is not to say that these assaults take place at the member's chapter facility however, it does call for a safe place for the members to be without fear, a refuge.

Crimes against women on college campuses do not follow any pattern. Crimes against college women happen from coast to coast, public and private, large and small

institutions (CheckVideo, n.d.). Providing a safe sense of home within the walls of a sorority house for the traditional college student leaving the comfort of their parents homes for the first time is something that should be taken very seriously, however, there is little to no guidance published to reference when National Housing Corporations are making decisions.

LITERATURE REVIEW

When researching best practices for National Housing Corporations, there are few applicable resources to reference. The majority of research revolves around the psychological impact of membership of a Greek organization with little to no reference to the housing.

An article in the Journal for College and University Student housing showed that students living in campus housing compared to those living in Greek housing had similar overall satisfaction with their experience and accommodations. However, one area the Greek life housing is lacking in is the perception of safety (Long, 2014).

Although there are no best practices for National Housing Corporations to follow, they can learn from other industries including hospitality (hotels), multifamily housing (apartments), and academic (k-12 schools) (Schneider, 2010).

For many years, hotels have refined technology to their benefit to create an efficient re-keying process for room turnover. They continue to further their efficiency with the exploration and use of customer's phones as a means of remote entry rather than key cards (Schwartz, 2019). There are many different technologies available for access control at varying price points. Technologies include fob, keypad, and biometrics, each with their advantages and disadvantages (Kuligowski, 2019).

When honing a best practice, all aspects of the system should be considered, and Garcia has published multiple books that provide insight into the limitations and evaluations of access control systems (Garcia, 2001, 2005). Access control is an accepted method of security across multiple industries. Additionally, there are a variety of access control systems on the market. Authors like Norman and Kuligowski explore the advantages and disadvantages of different types of systems (Kuligowski, 2019) (Norman, 2017). HID also published a booklet exploring access control in higher education (HID Global Corporation, 2020).

Alternatively, security cameras can be slightly controversial. This technology is becoming a commonplace in culture today however, privacy is a significant cultural concern (Arrigo, 2016). Surveillance Ethics by Macnish poses many questions regarding whether to have, record and monitor security cameras. These questions need to be reviewed and a criterion needs to be built for National Housing Corporations to determine whether the liability of security cameras is right for their organization (Estacia M. Brandenburg, 2020). Legality must also be considered (HG.org, n.d.).

If security cameras are deemed the correct action for the National Housing Corporation to take then there are additional execution questions on types of systems, monitoring, postings, and locations that will need to be answered. There are general resources that were utilized in this project to build the deliverable *Access Control and Security Cameras Toolkit for Women's Fraternity National Housing Corporations (Toolkit)*, which can be found in the Appendix, filled with best practices and recommendations. Resources will include a review of Palmer's *Security Cameras System: The Unconventional Guide*, Honey's *Electronic Protection and Security*

System: A Handbook for Installers and Users and Arrigo's *The SAGE Encyclopedia of Surveillance, Security and Privacy*.

Other resources used to explore the advantages and disadvantages of different types of systems and features were Vigderman's *Buying Guide* and Schneider's publication on *School Security Technologies*.

PURPOSE

The objective of this project was to conduct thorough research into access control systems and security cameras for residential and commercial settings to build the tangible *Toolkit* to be used as a reference for National Housing Corporations. This *Toolkit* includes a variety of recommendations based on occupancy, location, staff, cost, and maintenance.

Access control options explored included standard keys, keypads, fobs, biometrics and advanced technology alternatives for both exterior to interior access and interior access to members' personal rooms. Security cameras for interior and exterior were researched as well as monitoring practices.

The *Toolkit* has been compiled, vetted, and approved. It will be shared as a free resource with all National Housing Corporations for men's and women's Greek housing after the committee has reviewed and the course has been passed.

DEFINITIONS

Access Control – A security technique used to regulate who or what can enter a facility.

Alumna – A single female member who has graduated with an undergraduate degree or left the institution.

Alumnae – A group of alumna. Plural of Alumna.

Chapter – A campus-specific charter of the national organization. For example, Indiana University and Purdue University both have chapters of Alpha Gamma Delta.

Chapter Facility/House – A house on campus where members of the organization reside, hold meetings, and other events. Not all campuses have chapter facilities or houses.

Greek – This is in reference to the fraternity and sorority experience traditionally designated by two or three Greek letters. This is not in reference to nationality.

House Director – A female employee hired by the local or national house corporation to live in the chapter facility to supervise the members, maintain the facility, and oversee local operations sometimes including a full-service meal program for the resident members.

Local House Corporation – A legal entity made up of local volunteer alumnae holding title or leasing a facility for a chapter's living and meeting purposes.

Member(s) – A person who has participated in a private ceremony (initiation) to become a part of a lifelong membership organization. For women's fraternities and sororities, the person must identify as female and must be

an undergraduate of a particular institution in which the chapter is active.

Membership is a lifelong commitment and does not end after graduation.

National Housing Corporation – A legal entity run by a Greek organization's national or internal headquarters holding title or leasing a facility for a chapter's living and meeting purposes.

National Panhellenic Conference (NPC) – Is an umbrella organization for 26 national women's fraternities and sororities throughout the United States and Canada.

Resident Member – A member of a Greek organization that resides in the chapter facility.

Sister – A person who has been initiated into the sorority.

Sorority/Women's Fraternity – A society or organization of female undergraduate students at an institution. In this project, it is in reference to social women's fraternities and sororities.

ASSUMPTIONS

The project completed assumed the following conditions:

1. The landlord of any leased facilities will allow the installation of access control and security cameras as the tenant deems necessary.
2. All property management employees, including on-site staff House Directors, will be trained and able to use and maintain all equipment installed.
3. Facilities will have or obtain all the necessary utility requirements to maintain the equipment and services installed.

4. Equipment types listed in the best practices and recommendations are available in all markets.

5. Vendors with the required skills and equipment are available in all markets.

SCOPE

This project does not set a timeline or requirement for implementation or installation utilizing the information and recommendations from the *Toolkit*. Rather the completed deliverable will be a reference document for organizations who choose to utilize it. It will not provide specifications on utilities required for services or associated utility costs. Cost estimates will be based on one location and although an average of estimates will be sought after, it is understood that it may not be possible to obtain multiple estimates, and costs may vary based on city and state.

METHODOLOGY

To build the *Access Control and Security Cameras Toolkit for Women's Fraternity National Housing Corporations (Toolkit)* research was performed through interviews and research utilizing articles, journals and publications. Interviews of industry professionals were conducted with employees of National Housing Corporations, insurance professionals and other active industry consultant companies.

Once the research was compiled, the researcher weighed the available options with the concerns and available resources acquired and compiled from many conferences, roundtables and forums previously attended with National Housing Corporations and other industry professionals.

Recommendations were selected and the *Toolkit* was outlined, developed and revised. After a draft *Toolkit* was complete it was shared with industry professionals for a review. Those professionals included National Housing Corporations Executive Directors, Directors and Project Managers.

FINDINGS

ACCESS CONTROL | INITIAL CONSIDERATIONS

When consulting multiple articles, journals and books as reference for developing the *Toolkit* it was unmistakable that there are many considerations to be taken before any action should be made. Those considerations can be broken down into six key categories: assets, areas, users, threats, vulnerability and probability.

ASSETS

First and foremost, the assets of the company should be identified. According to Norman, there are four types of assets: people, property, proprietary information and business reputation.

In reference to women's fraternity or sorority housing, three of the four assets are present: people, property and business reputation. People and property are straightforward. The National Housing Corporations want to protect the people residing in their facility including members and staff as well as their physical asset and the contents.

Business reputation is also an asset worth protecting. National Housing Corporations want to have the reputation of providing safe housing for young women. It

is part of almost every mission statement. It could be incredibly damaging to the corporation if their reputation were to turn and it was interrupted that safety was not a priority. The desire to live in their facilities might decrease and their business operations would be hindered because of it (Norman, 2017).

AREAS

After identifying the assets, next the National Housing Corporation would need to identify the areas of the facility access control is desired. In the simplest of situations this could be just external entry but could become as complex as exploring updated access control for interior rooms including personal member rooms and staff only areas as commercial kitchen and mechanical closets (Craven, 2018).

USERS

Once the extent of the access control has been determined, the users should be identified. Identifying the users will determine the access levels (Craven, 2018). For a National Housing Corporation, the user groups will include National Housing Corporation staff, local year-round staff, members, advisors and third-party vendors or contractors.

National Housing Corporation staff and local year-round staff user group will have access to the facility twenty-four hours a day, 365 days a year. They will require access to the entire facility without any limitation to the personal member rooms, roofs and mechanical closets.

Then there is the seasonal staff member user group who could be male or female and would only require access while the facility was occupied during

predetermined hours. These staff members would not require access after 8:00 p.m. or before 5:00 a.m. each day nor would they require access over the summer months when the members are not residing in the facility.

The member user group would have two to three different sub-groups: resident member, out-of-house member and in some cases, new member. The resident member user group would require access while the facility was open, typically the week before classes in August through spring commencement with applicable closings for major campus breaks. They would require access to the facility twenty-four hours a day and their personal member room. With an access control system, access to other resident member's personal member rooms, staff only areas, roofs and mechanical areas would be restricted.

Similar to the resident member group, the out-of-house member user group would have the same access excluding access to personal member rooms. This group could also have a daily time restriction similar to seasonal staff members if that is desired by the chapter leadership and the National Housing Corporation.

Finally, the new member user group, if allowed access, could have the same access as the out-of-house member user group or additional restrictions on time could be imposed. Many organizations and National Housing Corporations vary on policy with the access of new members because this group of members have not yet complete initiation and therefore are not a pledged to uphold the same values as the initiated members of the organization.

Lastly, advisors, third-party vendors and contractors should not require access after 8:00 p.m. or before 8:00 a.m. each day. Advisors should not require access over

the summer months when the members are not residing in the facility. They would only require general entry privileges and master access to all member personal rooms in case of inspection or emergency. Vendors and contractors would require master access to all areas similar to the year-round staff user group, however, there are additional considerations. This master access could be restricted to a timeframe while the members reside in the facility or in case of a physical key-type entry, could be checked out from the staff member to ensure no abuse of the access.

THREATS

Once the assets, areas and users are identified, the National Housing Corporation will have to turn to risks. Identifying risks begins with identifying the threats. Threats and risks can vary greatly and come from various means however, this *Toolkit* will focus on threats that can be assuaged by access control. Threats include terrorism and three types of criminals: violent, economic and petty. (Norman, 2017)

Terrorism is radical and, on many campuses, very unlikely however, it is considered a threat. More likely is criminal activity. Violent criminals will look to cause harm to the occupants of a facility through injury or death. Economic criminals are seeking to steal property, assets or money for their own economic advancement and finally petty criminals, the most likely on a college campus, include those who are causing minor property damage including graffiti and drunken or loud disturbances (Norman, 2017).

VULNERABILITY

Vulnerability is a trait or feature of a facility that a person with ill intentions can exploit to their advantage. This can include opportunity to enter facilities or areas which access is or should be limited or concealment of illegal activities or precursor to illegal activities. Vulnerability can be in a physical form such as an open window, propped open door or lack of access control or it could be in a procedural form such as allowing tailgating (persons following others into a secure facility without using access control systems) (Norman, 2017).

PROBABILITY

Probability is the likelihood a threat and exploitation of a vulnerability will occur.

“Factors affecting probability include:

- Interest level including the value of assets to potential threat actors
- Opportunities available to exploit
- Number of potential threat actors who might be interested in carrying out a threat scenario
- Effectiveness of existing security countermeasures” (Norman, 2017)

The probability of a threat or exploitation increases in the summer months and long campus breaks for the facilities because they are unoccupied and many times, the resident staff member is spending time away from the facility.

ACCESS CONTROL | SYSTEM CONSIDERATIONS

After the initial considerations are identified and the National Housing Corporation has concluded to move forward with upgrading, or implementing new,

access control system specific operations should be considered. These considerations include functionality, safety, maintenance and budget. All of these considerations will determine the type of system recommended to be installed before identifying the specific system to be installed.

Many budget access control systems are decades old, operating on outdated software and are recommended to be upgraded every ten years (Craven, 2018).

FUNCTIONALITY

Functionality is key. The National Housing Corporation will need to consider factors including system management, preferred user method and multi-functionality.

There are plenty of options for access control on the market but not all will fit the needs of National Housing Corporations. System management is the biggest determining factor when considering functionality. System management options include local management either manually on the unit such as a keypad or fob reader or electronic management on a local computer. System management can also be remote in the form of cloud-based or web-based technology (Kuligowski, 2019).

Table 1
Advantages and Disadvantages of Access Control Management Systems

MANAGEMENT OPTION	ADVANTAGES	DISADVANTAGES
Local Manual	<ul style="list-style-type: none">– Simple– Low Cost	
Local Electronic		<ul style="list-style-type: none">– Requires Compatible Operating System
Remote Cloud-Based	<ul style="list-style-type: none">– Off-site Accessibility	
Remote Web-Based	<ul style="list-style-type: none">– Off-site Accessibility	

Each type of system management has their advantages and disadvantages as seen in Table 1 above. Most facilities run by National Housing Corporations have a live-

in staff member that fills the role of an on-site property manager however, not all campuses require this, or it is not the campus norm. For example, the University of Akron and Central Michigan University have women's fraternity and sorority housing run by National or Local Housing Corporations without any on-site staff. Circumstances like these must be considered.

Additional considerations should be made for multi-functionality and user preferences and satisfaction. Some of these systems could be used in other capacities. For example, Smart Cards can be used as access control for the member personal rooms eliminating the need for keys or increasing security at facilities without access control for member areas.

The preferences of the users are another functionality consideration. Many traditional college students have grown up with technology. They do not know a time without it. Anything that is outside of the seamless technological experience is an inconvenience. They expect ease and reliability (HID Global Corporation, 2020).

There are many advantages and disadvantages of different systems as seen in Table 2.

Table 2
Advantages and Disadvantages of Access Control Systems

SYSTEM TYPE	ADVANTAGES	DISADVANTAGES
Keypad <i>Code System</i>	<ul style="list-style-type: none"> – Basic System – Local Manual or Electronic Management – Easily managed by on-site staff 	<ul style="list-style-type: none"> – Electronic Management would require a compatible operating system
Magnetic Strip Cards	<ul style="list-style-type: none"> – Basic System – Local Manual or Electronic Management – Easily managed by on-site staff 	<ul style="list-style-type: none"> – Electronic Management would require a compatible operating system
Key Fobs <i>125kHz</i>	<ul style="list-style-type: none"> – Basic System – Local and Remote Management Options available 	<ul style="list-style-type: none"> – Off-site management requires inventory assistance on-site

	– Can be managed by on-site or off-site staff	
Smart Cards	– Local and Remote Management Options available – Can be managed by on-site or off-site staff	– Off-site management requires inventory assistance on-site
Biometric <i>Fingerprint</i>	– Local and Remote Management Options Available – Convenient for user, nothing to carry	– Electronic Management requires a compatible operating system on-site
Mobile Phone	– Local and Remote Management Options Available	– Easy Cloud and Web-based management

SAFETY

When researching a new access control system two types of safety should be considered: emergency safety and system safety.

In times of emergency the chosen system will need to perform the tasks required of it and work in conjunction, or minimally not inhibit emergency measures. Many fire suppression systems will have push bars on external fire exit doors that in case of emergency, when compressed will sound the fire alarm. These doors should not be used as general ingress and egress.

Additionally, with any system that is installed access will need to be shared with emergency personnel in case of emergency. In most situations, this will be through some means of access (key, key fob, smart card) secured in a Knox box. A Knox box is a secured lockbox on the exterior of commercial facilities for use by the fire department in case of emergency.

System safety should also be considered. Certain systems are more secure than others. For example, the commonly used 125kHz systems and magnetic cards are easily cloned and duplicated creating a safety and security vulnerability (HID Global

Corporation, 2020). Advantages and disadvantages of different systems can be seen in Table 3.

Table 3
Advantages and Disadvantages of Access Control Safety

SYSTEM TYPE	ADVANTAGES	DISADVANTAGES
Keypad <i>Code System</i>	– Personal Code increases trackability	– Codes are easily shared
Magnetic Strip Cards		– Easily stolen and/or cloned
Key Fobs <i>125kHz</i>		– Easily stolen and/or cloned – Fobs are often on keychains with organization key chain
Smart Cards	– Encryption Technology	
Biometric <i>Fingerprint</i>	– Individualization creates for additional security	
Mobile Phone	– Individualization creates for additional security	

MAINTENANCE

Any system will require maintenance however, some systems require more maintenance, tracking and upkeep than others. For example, a code system might require a technician for any code changes. A fob system will require an assignment, distribution and tracking system of all fobs. A biometric or mobile access system will require software updates and hardware updates as the equipment ages.

When considering an access system that will be on the exterior of a building in the elements as well as inside a facility occupied by college students, durability is an issue that should be considered in the selection process. Elements of the system must be able to hold up to weather elements and unpredictability of college activities. (Kuligowski, 2019) Table 4 outlines the advantages and disadvantages of system maintenance for different types of systems researched.

Small details such as a low battery indicator and combination or back up access, such as a traditional hard key, are also elements to inquire about when selecting an access control system (Kuligowski, 2019). While these elements may seem menial, they will make a difference in a situation where there is a malfunction or power failure.

Table 4
Advantages and Disadvantages of Access Control System Maintenance

SYSTEM TYPE	ADVANTAGES	DISADVANTAGES
Keypad <i>Code System</i>	<ul style="list-style-type: none"> – Easy to install – Low maintenance 	
Magnetic Strip Cards	<ul style="list-style-type: none"> – Easy to install 	<ul style="list-style-type: none"> – Cards must be inventoried, distributed and tracked locally
Key Fobs <i>125kHz</i>	<ul style="list-style-type: none"> – Easy to install 	<ul style="list-style-type: none"> – Fobs must be inventoried, distributed and tracked locally
Smart Cards		<ul style="list-style-type: none"> – Cards must be inventoried, distributed and tracked locally
Biometric <i>Fingerprint</i>		<ul style="list-style-type: none"> – Software updates
Mobile Phone		<ul style="list-style-type: none"> – Software updates – Requires power supply for computer – Requires a back mode of entry if power supply is disrupted – Quantity limitations

BUDGET

Unfortunately, no company, including National Housing Corporations, have unlimited means to fund projects and budget is the constraining factor with access control. Some of the more basic systems are relatively inexpensive while the more advantage technology is more expensive.

When choosing a type of system, consider if the system can be utilized in other areas of the facility. Previously mentioned, systems such as the mobile phone and smart cards can be used in other capacities within the facility. Similar to major hotel chains, if a personalized app development is attainable it could be used in other areas

of the facility (Schwartz, 2019). For example, it could be used to post menus for the meal program and allow mobile access to housing related documents include house rules, maintenance requests and staff contact information.

Alternatively, the Smart Cards could be scanned at a station in the dining room to collect a roster of which members attended meals (HID Global Corporation, 2020). This could assist with accounting for billing and the chef with meal counts. Smart Cards could also be used as access control to member personal rooms and staff only areas eliminating the need for hard keys to those spaces. If there is the ability to use the technology in multiple ways, the return on investment will increase.

Budget is the driving force in property management and therefore a major consideration when choosing systems and projects. Table 5 outlines relative cost of systems and weighs the advantages and disadvantages of each system type.

Table 5
Advantages and Disadvantages of Cost of Access Control Systems

SYSTEM TYPE	ADVANTAGES	DISADVANTAGES
Keypad <i>Code System</i>	– Inexpensive – Less than \$300 per unit	– No multi-functionality
Magnetic Strip Cards	– Inexpensive	
Key Fobs <i>125kHz</i>	– Inexpensive	
Smart Cards		– Multi-functionality
Biometric <i>Fingerprint</i>		– Expensive – Over \$350 MSRP per unit
Mobile Phone	– Savings on “keys” – Reduced environmental impact	– Expensive – Over \$350 MSRP per unit

ACCESS CONTROL | INSTALLATION

Installation can vary from system to system. A basic keypad system could be installed by a general handyman but a biometric or mobile phone system would require a technician with specific expertise and training.

As a National Housing Corporation working with hundreds of facilities across the nation it might find it desirable to utilize the same system at every location. This would be ideal and can likely be achieved by hiring a national company. However, if the National Housing Corporation hires a local or regional vendor, they should also consider the long-term maintenance required for a system. A regional or local vendor will likely install a system that is specified in order to retain the customer however, if specified system is not a familiar brand of system, the upkeep could be a painful process of troubleshooting and guesswork. Consider installing a system the vendor is familiar with in order to ensure proper knowledge of the system, upkeep and common issues (Richardson, 2020).

ACCESS CONTROL | AFTER INSTALLATION

TRAINING

After the installation, the National Housing Corporation will need to develop a communication plan for varying audiences to include members, advisors, parents and staff. Communication should include the system installed, benefits of the system and basic user instructions. For members, advisors and parents the safety benefits should be emphasized and include the distribution process if different than years past. For staff, the communication should include required training sessions and a point of contact for any issues or questions they encounter.

TESTING

In order to ensure all systems are performing at optimal capacity, quarterly testing should be performed. An on-site staff member, chapter officer or contractor can

schedule and conduct a simple assessment. The assessment would need to be adjusted depending on the system selected however in any assessment every reader should be visual inspected and tested with whatever access means (code, fob, mobile, etc.). Any wear or dysfunction should be reported to the National Housing Corporation and should be fixed immediately as to not create a vulnerability (Craven, 2018).

AUDITS

Finally, annual audits are recommended by Craven (Craven, 2018). Each system has a cache of users. Many of these users turnover from year to year, sometimes from academic term to the next, and will need to be removed from the system. In this setting it is recommended that the National Housing Corporation conduct an audit at the end of each term.

SECURITY CAMERAS | INITIAL CONSIDERATIONS

The first considerations that need to be evaluated by a National Housing Corporation that is thinking about installing security cameras are need and privacy.

NEED

It is a common practice for property owners to have security cameras on property. “An individual is justified in carrying out surveillance of his property if it is to secure the property from theft, but not if it is to spy on his tenants.” (Macnish, n.d.) National Housing Corporations facilities are a target for petty criminals throughout the academic year and particularly vulnerable when it sits unoccupied for three months over summer break. The need is justified.

PRIVACY

Privacy is a very complex topic. Privacy has been debated and legally argued for decades. “Despite the disagreements, most would agree that on an individual level, privacy affords us the space to be ourselves and to define ourselves through giving us a degree of autonomy and protecting our dignity.” (Macnish, n.d.) Consensus has been gathered that people do not have the right to privacy in public and therefore, for property and business owners, exterior cameras are a common and accepted practice. Interior cameras on the other hand can become problematic. Interior cameras are allowed in areas where people do not have a reasonable right to privacy such as a hotel lobby or restaurant (HG.org, n.d.).

As it relates to National Housing Corporations, they could, if desired, install interior security cameras in the common areas but would not be able to install anything on the members’ living floors or areas. In this area there is an expectation of privacy because many sorority houses use a community bathroom.

Sorority Insurance provider, MJ Insurance, discourages the use of interior security cameras unless facing exterior entry doors (Estacia M. Brandenburg, 2020).

SECURITY CAMERAS | SYSTEM CONSIDERATIONS

After the initial considerations have been weighed, the National Housing Corporation will need to establish a company policy around security camera video access and use and determine the specifications of a system which include location, types of cameras, wired or wireless, monitored or self-monitored, recording system and budget.

COMPANY POLICY

First and foremost, after a National Housing Corporation decides to install security cameras, they must develop a company policy around procedure and employee expectations. This policy will be unique to each organization but should consider the following:

- Video viewing policy – who can view the video, for what reasons and who it can be shared with
- Location of cameras – if the company has or allows for interior cameras the policy will need to be vetted by an attorney and likely, consent language will need to be added to the Resident Member Agreement
- Library – how long is the video allowed to be kept before deleting

The company policy should be reviewed by an attorney, approved by the organizations' board and communicated with all staff.

LOCATION

Location of security cameras and supplementary equipment are key characteristics of a security camera installation. Security cameras should be placed high and out of reach to avoid tampering, overlapping in coverage when possible to ensure complete capture and recording equipment, if within the facility, should be kept in a secure location that only staff can access (Schneider, 2010).

Exterior cameras should be placed in areas attracting problem behaviors (Schneider, 2010). National Housing Corporations should consider placing cameras facing the parking lot, points of entry to the facility and any areas attracting unwanted behavior such as smoking on property.

Interior cameras are extremely sensitive and should only be installed after thorough deliberation and consultation of both the corporation's insurance company and attorney. Interior cameras should never be located in member areas and it is recommended only installing interior cameras facing entry points (HG.org, n.d.).

TYPES OF CAMERAS

When selecting a security camera system there are many aspects that need to be reviewed. The most important part is the camera itself. The rest of the system can only be as good as the cameras installed.

Like other technology, security cameras have progressed in leaps and bounds since its inception. There are options for both analog and high-definition cameras, whenever possible the higher-definition cameras should be selected (Schneider, 2010). Analog cameras are an inexpensive alternative but do not provide quality video and largely unhelpful in identifying persons of interest in any unwanted activities on the National Housing Corporations property.

Cameras also come in motion detecting and moving options. In the case of National Housing Corporations, the fixed option is the best option because it requires minimal maintenance and no moving parts to create weak points in the system (Schneider, 2010). There are options for flood-light camera combination units. This type of unit would activate the light and record simultaneously creating a better environment for capturing the highest quality video (Vigderman, 2020).

Lastly, cameras can come in color, black and white, night-vision, among other settings. These settings should be evaluated based on the installation location. If an

area is brightly lit, a color camera might be best while if it is in a low light area at night, black and white might be the best option (Schneider, 2010).

WIRED VERSUS WIRELESS

Hardwired cameras can feel like a very daunting project and come with a significant price tag if utilities are not in the right spot however, they are the more reliable choice for National Housing Corporations. Wireless systems require more maintenance because batteries require replacement for the system to continue to work (McMullen, 2019).

Wireless systems have many benefits including mobile phone applications, easy installation and inexpensive, however, those systems also have significant network requirements which could lead to an increase in the facilities internet service and associated monthly fees (McMullen, 2019).

VIDEO MONITORING

Video monitoring refers to the live viewing of the video feed. National Housing Corporations do not need to have a monitoring service in most location and should not contract for the unnecessary expense. If a situation were to arise that required police attention, 911 should be called and video can be shared. If the facility is located in a high crime area such as University of Southern California Greek Row, video monitoring might be an option worth exploring for full time or nighttime monitoring.

RECORDING METHOD

The last piece of the equipment that should be considered is the method and location of the video recordings. Many systems now have the ability to access footage on a web or cloud-based server. This is ideal for National Housing Corporations at locations without on-site staff. However, local storage is also acceptable for locations with on-site staff that can access the video.

Video can be recorded locally on a computer or server. This would require additional equipment and, in many cases, cannot be accessed remotely. Alternatively, web or cloud-based storage can be accessed remotely but could have a small fee associated for the space (Schneider, 2010).

The means of recording does not have to hold video from when the National Housing Corporation began recording, it is recommended to not keep such data (Macnish, n.d.). The time requirement that video footage must be stored should be clearly defined in the company policy. There is no industry standard or requirement, unless by local authorities, on how long to keep video footage for apartments, campus residence halls or hotels. All guidance recommends somewhere between 15 and 90 days (Hendrix College, 2019).

SECURITY CAMERAS | INSTALLATION

Much like access control, it would be ideal for National Housing Corporations to use the same system at every location equipped with security cameras, however just as access control, the local vendor should install a system which they are familiar to ensure smooth operations for years to come because of the proper knowledge of the

system, upkeep and understanding of common issues and solutions (Richardson, 2020).

SECURITY CAMERAS | AFTER INSTALLATION

After installation is complete, the National Housing Corporation will need to schedule training and maintenance.

TRAINING

Just like the roll out for access control changes, the National Housing Corporation will need to develop a communication plan for similar audiences including members, advisors, parents and staff. Communication should include the system installed, locations of security cameras and the intended benefits of the system. For members, advisors and parents the safety benefits and privacy should be emphasized including parts of the company policy on access to the footage. For staff, in addition to the same talking points as the members, the communication should include any required training sessions.

MAINTENANCE

As with any system, security camera systems will require maintenance. Rather than waiting until an issue is encountered, the National Housing Corporation should set up a maintenance schedule for the system. The schedule should include an annual visual inspection of the cameras and network cables, a review of the current software and inspection of the recording device, if applicable.

LIMITATIONS

There were few limitations to development of the *Toolkit*. One limitation continues to be the training and understanding of local employees. Many of the on-site staff, House Directors, for these facilities are limited in their technological abilities and could prove to be an obstacle in training.

Another limitation was the availability of industry peers for consultation during the chaotic time of COVID-19. Many National Housing Corporation are focused on responding to the campus's new policies and schedules. Industry professionals were able to be interviewed and previous conference sessions and roundtables were utilized as reference for needs, wants and available resources. However, review of the completed paper and *Toolkit* were unable to be completed in time for committee review due to time and schedule restraints.

CONCLUSION

National Housing Corporations for women's Greek organizations are predominantly young companies navigating a new frontier in property and facility management. Established industry standards and norms for Greek undergraduate housing is rare. One common thread through many of the National Housing Corporations' missions is the promise of safety for their resident members.

This project included research into two different areas of safety for National Housing Corporations for women's fraternities and sororities. The lack of un-biased resources for this type of property management was obvious during the literature review conducted prior to the initiation of this project. However, after conducting additional

research, utilizing related industries including university housing, apartments and hotels, insight was found recommendations were established for the organizations.

Regrettably, universities and property management companies established for apartments and hotels have more financial resources than National Housing Corporations being small non-profit property management companies dedicated to housing for their organization's membership alone.

Through the research it was determined that a variety of recommendations would need to be provided based on budget. Access control was the first safety measure researched. There is a variety of means on the market today from basic keypad entry to high-tech biometric and cell phone access systems. Based on user preferences, the higher tech options would be the preference of the young membership. This would include access control through the resident's cell phone like a digital keycard offered at some hotels. Unfortunately, this option is one of the more expensive options. If the National Housing Corporation has the financial resources this solution would be the recommendation. Alternatively, if the corporation has a smaller budget, the second recommendation is a smartcard system. It has hurdles such as distribution and inventory tracking but is secure and safe for the residents. Finally, for the National Housing Corporations on a small budget or a small facility, the keypad option is recommended. This is a low maintenance, low cost option for access control. There is no inventory to monitor and distribute. The only hurdle with this option is training or hiring someone to periodically change the access code.

As for security cameras, the recommendation provided is to install an exterior system monitoring parking lots, facility entry and exit points and any crime areas.

Internal cameras are discouraged unless necessary and, in those cases, the cameras should only be pointed at entry points and never installed on any living floors of the facility.

When identifying a specific security camera system to install, the system should allow for remote access whenever possible and the highest quality and quantity of cameras allowed by the National Housing Corporation's budget. It is also recommended that whenever possible, utilize a hardwired system with a Cloud or web-based recording system. This will provide reliability and remote access to the video recordings from any location. The most important exercise of security cameras is the determining the company policy and should be completed during the exploration phase. Without a strong and thorough company policy related to video recording, security cameras can be a large liability for National Housing Corporations.

In both forms of safety systems addressed in this project, access control and security cameras, each will prove inadequate unless there are intentional implementation plans, communication and training for staff and members. In an effort to make these recommendations and best practices easy for the National Housing Corporations, a *Toolkit* was created that includes recommendations, considerations and recommended steps for implementation.

National Housing Corporations have a lot of room to grow and develop. Utilizing the best practices from closely related industries to create and establish best practices for this unique niche of property management will be key to the continued success of these small, not-for-profit national property management firms.

REFERENCES

- Alpha Delta Pi. (n.d.). *History*. Retrieved from Alpha Delta Pi: <https://www.alphadeltapi.org/page/history/>
- Alpha Gamma Delta. (n.d.). *Fraternity Housing Corporation*. Retrieved from Alpha Gamma Delta Fraternity Housing Corporation: <https://alphagammadeltahousing.org/>
- Alpha Omicron Pi. (n.d.). *Alpha Omicron Pi Properties*. Retrieved from Alpha Omicron Pi: <https://www.alphaomicronpi.org/properties/>
- Alpha Phi. (n.d.). *Alpha Phi Firsts*. Retrieved from Alpha Phi: <https://alphaphi.org/about/history/alpha-phi-firsts/>
- Arrigo, B. A. (2016). *The SAGE Encyclopedia of Surveillance, Security, and Privacy*. Thousand Oaks: SAGE Publications.
- Bustamante, J. (n.d.). *Property Management Industry Statistics*. Retrieved from iPropertyManagement: <https://ipropertymanagement.com/research/property-management-industry-statistics>
- CheckVideo. (n.d.). *The Safest and Most Dangerous College Campuses in America*. Retrieved from CheckVideo: <https://www.checkvideo.com/blog-post/nationwide-campus-safety-comparison/>
- Craven, V. D. (2018, August 10). *6 Tips to Improve Your Building's Access Control System*. Retrieved from Buildings: Smarter Facilities Management: <https://www.buildings.com/news/industry-news/articleid/21630/title/improve-access-control-system>
- Delta Gamma. (n.d.). *Fraternity Housing Corporation*. Retrieved from Delta Gamma: <https://www.deltagamma.org/housing/fraternity-housing-corp>
- Estacia M. Brandenburg, J. (2020, February 11). Client Executive. (E. White, Interviewer)
- Garcia, M. L. (2001). *The Design and Evaluation of Physical Protection Systems*. Burlington: Butterworth-Heinemann.
- Garcia, M. L. (2005). *Vulnerability Assessment of Physical Protection Systems*. Burlington: Elsevier.

- Hendrix College. (2019). *STUDENT HANDBOOK: College Security Camera Policy*. Retrieved from Hendrix College: <https://www.hendrix.edu/studentlife/handbook.aspx?id=80045#:~:text=All%20surveillance%20records%20shall%20be,by%20the%20Dean%20of%20Students>.
- HG.org. (n.d.). *Surveillance Cameras - Where Is It Legal to Place Them?* Retrieved from HG.org Legal Resources: Surveillance Cameras - Where Is It Legal to Place Them?
- HID Global Corporation. (2020). *Physical Access Control in Higher Ed: A Mosaic of Perspectives*. HID.
- Honey, G. (1998). *Electronic Protection and Security Systems: A Handbook for Installers and Users*. Woburn: Newnes.
- Kappa Alpha Theta. (n.d.). *Fraternity Housing Corporation*. Retrieved from Kappa Alpha Theta: <https://www.kappaalphatheta.org/housing>
- Kuligowski, K. (2019, November 21). *Buying Guide for Keyless Electronic Door Locks*. Retrieved from Business News Daily: <https://www.businessnewsdaily.com/15334-buying-guide-keyless-door-locks.html>
- Long, L. D. (2014). Does It Matter Where College Students Live? Differences in satisfaction and Outcomes as a Function of Students' Living Arrangement and Gender. *The Journal of College and University Student Housing*, 66-85.
- Macnish, K. (n.d.). *Surveillance Ethics*. Retrieved from Internet Encyclopedia of Philosophy: <https://www.iep.utm.edu/surv-eth/>
- McMullen, B. (2019, December 23). *Installing Security Cameras? Why You Should Go Wireless*. Retrieved from Campus Safety: <https://www.campussafetymagazine.com/news/installing-security-cameras-why-you-should-go-wireless/>
- National Institute of Justice. (2008, September 30). *Factors That Increase Sexual Assault Risk*. Retrieved from National Institute of Justice: <https://nij.ojp.gov/topics/articles/factors-increase-sexual-assault-risk#citation--1>
- New World Encyclopedia. (n.d.). *Fraternity and Sorority*. Retrieved from New World Encyclopedia: https://www.newworldencyclopedia.org/entry/Fraternity_and_sorority
- Norman, T. L. (2017). *Electronic Access Control*. Cambridge: Butterworth-Heinemann.

- Palmer, J. (2016). *Security Cameras Systems: The Unconventional Guide*. Lulu Press, Inc.
- Pi Beta Phi. (n.d.). *SO THERE'S ALWAYS A PLACE TO CALL HOME*. Retrieved from Pi Beta Phi: <https://www.pibetaphi.org/housing/resources>
- Rachel E. Morgan, P. B. (2019). Criminal Victimization. *NCJ*. Retrieved from Bureau of Justice Statistics: <https://www.bjs.gov/index.cfm?ty=tp&tid=955>
- Richardson, J. (2020, June 2). Project Manager. (E. White, Interviewer)
- Schneider, T. (2010, January). *School Security Technologies*. National Clearinghouse for Educational Facilities.
- Schwartz, K. (2019, July 24). *Everybody Hates the Key Card. Will Your Phone Replace It?* Retrieved from The New York Times: <https://www.nytimes.com/2019/07/24/travel/hotel-security-mobile-keys.html>
- Sigma Kappa. (n.d.). *Sigma Kappa National Housing Corporation*. Retrieved from Sigma Kappa: <https://sigmakappa.org/housing/>
- Tri Delta. (n.d.). *Tri Delta Housing*. Retrieved from Tri Delta: <https://www.tridelta.org/about/executive-office/nhc/>
- Vigderman, A. (2020, May 6). *The Ultimate Guide to Home Security Cameras*. Retrieved from security.org: <https://www.security.org/security-cameras/>
- Zeta Tau Alpha. (n.d.). *Housing*. Retrieved from Zeta Tau Alpha: <https://zetataualpha.org/housing>
- Zeta Tau Alpha. (n.d.). *Your ZTA home*. Retrieved from Zeta Tau Alpha: <https://zetataualpha.org/housing>

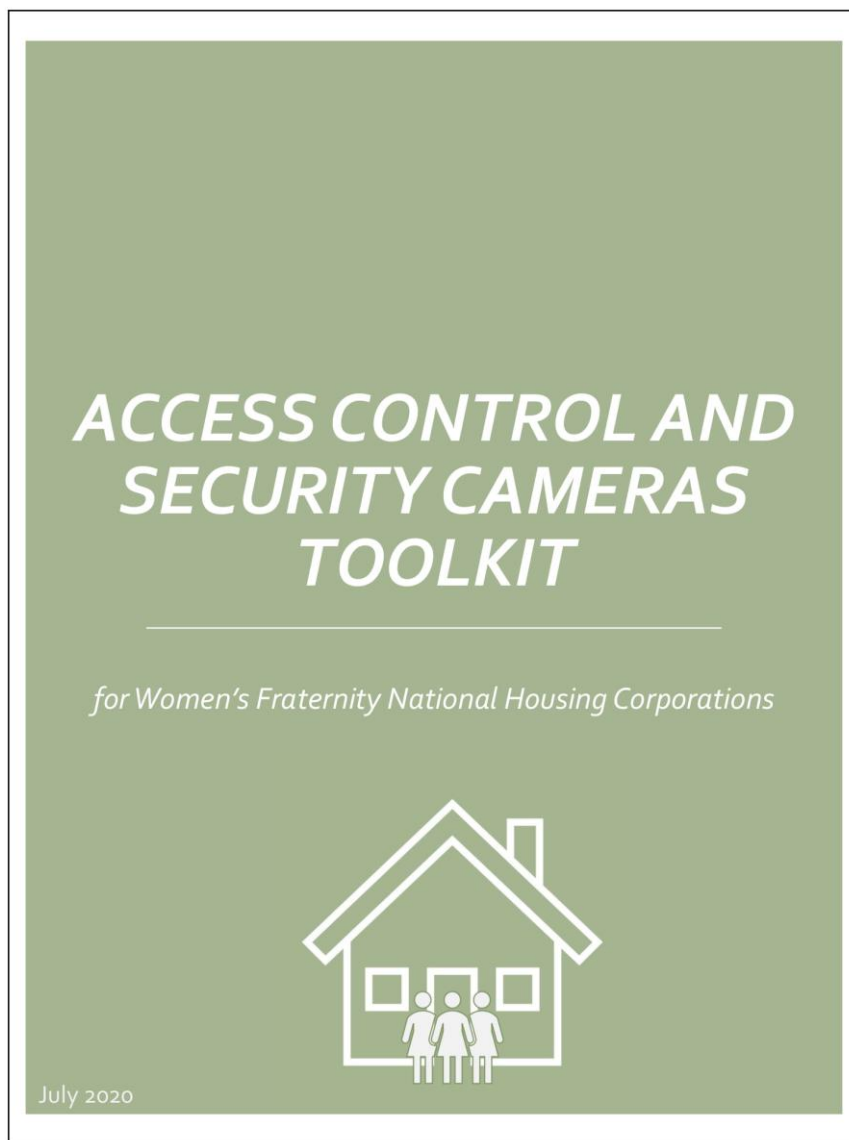
APPENDIX

Table of NPC Organizations with National Housing Corporations

	Organization Established	National Housing Corp	NHC Founded
Alpha Chi Omega	1885	Y	
Alpha Delta Pi	1851	Y	
Alpha Epsilon Phi	1909		
Alpha Gamma Delta	1904	Y	2010
Alpha Omicron Pi	1897	Y	2001
Alpha Phi	1872	Y	
Alpha Sigma Alpha	1904		
Alpha Sigma Tau	1899		
Alpha Xi Delta	1893	Y	
Chi Omega	1895		
Delta Delta Delta	1888	Y	1991
Delta Gamma	1873	Y	1989
Delta Phi Epsilon	1917	Y	
Delta Zeta	1902	Y	
Gamma Phi Beta	1874	Y	
Kappa Alpha Theta	1870	Y	2007
Kappa Delta	1897		
Kappa Kappa Gamma	1870		
Phi Mu	1852		
Phi Sigma Sigma	1913	Y	
Pi Beta Phi	1867	Y	2008
Sigma Delta Tau	1917		
Sigma Kappa	1874	Y	1993
Sigma Sigma Sigma	1898		
Theta Phi Alpha	1912	Y	
Zeta Tau Alpha	1898	Y	1977

Table includes year of incorporation for the National or International Fraternity/Sorority, the existence of a National Housing Corporation and the year the NHC was established if provided. All information was compiled from NPC and Fraternity/Sorority housing websites.

Access Control and Security Cameras Toolkit for Women's Fraternity National
Housing Corporations



WELCOME!

Welcome to the Access Control and Security Cameras Toolkit for Women's Fraternity National Housing Corporations!

Toolkit Guide

How To Use This Toolkit

This Toolkit was developed to assist National Housing Corporations in the consideration process for Access Control and Security Cameras. It contains considerations, recommendations and guidelines.

While this Toolkit was built after research it should be emphasized that the industries are constantly changing and each National Housing Corporations' needs are different. One solution might work for one but not another.

Who is the Toolkit for?

This Toolkit was created for Women's Greek National Housing Corporations. However, this resource could also be used by Men's National Housing Corporations or Local Housing Corporations or Associations.

Will the Toolkit be updated?

This Toolkit was created as a starting point for industry best practices. It is not a complete document but is a collection of the recommended best practices based on the research conducted thus far.

The Toolkit will be updated regularly with additional resources, recommendations and guidelines as additional research is conducted and contributed to the document.

Additional content can be sent to eapple@iu.edu.

Access Control & Security Camera
Toolkit

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ACCESS CONTROL

Facility Assessment

Chapter Name _____

Institution _____

Address _____

Property Size _____ Sq. Ft.

Facility Size _____ Sq. Ft.

Entry Points _____

Occupancy _____

On-Site Staff ☐ Yes ☐ No



ACCESS CONTROL

System Recommendations

Recommendation 1 | LED 10 Number Keypad

- Recommended for facilities for 1-25 members
- Budget Conscious
 - Under \$300 per unit (labor not included)
- Managed Locally



Recommendation 2 | Smart Cards

- Recommended for facilities for over 25 members
- Budget Friendly
 - Approximately \$300 per unit (labor not included)
 - Smart Cards \$5-\$10 per piece
- Managed Locally with Remote Access



Recommendation 3 | Mobile App

- Recommended for facilities for over 25 members
- Remote Management
- Multifunctional uses
- \$400+ per unit (labor not included)



Access Control & Security Camera
Toolkit

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ACCESS CONTROL

Secured Area & User Identification



Desired Secured Areas

- ☐ Exterior / Entry ☐ Members Personal Rooms
☐ Staff Only Areas ☐ Other _____

User Groups

Year-Round Master Access

This group will include House Directors, IHQ Staff and NHC Staff.

Seasonal Access

This group will include all kitchen and housekeeping staff.

Resident Members

This group will include all members residing in the facility.

Out-of-House Members

This group will include all initiated members not residing in the facility.

New Members

This group will include all new members prior to initiation.

Advisors

This group will include all alumna advisors requiring facility access.

Third Party Vendors

This group will include all paid contractors not on staff.

ACCESS CONTROL

User Group Restrictions

User Group Restrictions

Year-Round Master Access

No Restrictions. Master access to all areas.

Seasonal Access

Access to facility and staff only areas.

Day Restrictions _____

Time Restrictions _____

Resident Members

Access to facility and specific member personal area.

Break Restrictions _____

Time Restrictions _____

Out-of-House Members

Access to facility.

Day Restrictions _____

Time Restrictions _____

New Members

Access to facility.

Day Restrictions _____

Time Restrictions _____

Advisors

Access to facility.

Day Restrictions _____

Time Restrictions _____

Third Party Vendors

Access to facility.

Day Restrictions _____

Time Restrictions _____



ACCESS CONTROL

Vendor Questions & System Requirements

Recommendation 1 | LED 10 Number Keypad



- Does the system require a power source?
 - If the system does require a power source, is there a battery backup?
 - If the system does not require a wired power source but instead is run off battery power, how will a low battery be identified?
- What maintenance will this system require?
- What is the expected lifespan of the system?
- Will any software need to be updated in the future?
 - If so, how does that happen?
- How is the code changed?
 - Does this require a technician, or can a local staff member easily execute this change?
- Can the system hold multiple codes?
 - Can the system restrict certain code access to certain hours?
Example: Vendor code only work from 8 a.m. to 7 p.m.
- Will a user manual be provided?
- Is there a warranty for the system?

ACCESS CONTROL

Vendor Questions & System Requirements

Recommendation 2 | Smart Cards

- Does the system require a power source?
 - If the system does require a power source, is there a battery backup?
 - If the system does not require a wired power source but instead is run off battery power, how will a low battery be identified?
- What maintenance will this system require?
- What is the expected lifespan of the system?
- What software is needed to manage this system?
 - Is the software cloud or web-based?
 - If not cloud or web-based, what are the requirements of the computer needed to manage the software?
- Will any software need to be updated in the future?
 - If so, how does that happen?
- How are the smart cards managed in the system?
 - Does this require a technician, or can a local staff member easily execute this?
- Can the system hold user groups?
 - Can the system restrict certain access to certain hours? Example: Vendor card only work from 8 a.m. to 7 p.m.
- Will a user manual be provided?
- Is there a warranty for the system?
- Is there any ongoing technical support?
- How many smart cards are provided at start up?
 - How are replacement cards purchased?

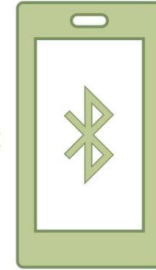


Access Control & Security Camera
Toolkit

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ACCESS CONTROL

Vendor Questions & System Requirements (((



Recommendation 3 | Mobile App

- Does the system require a power source?
 - If the system does require a power source, is there a battery backup?
 - If the system does not require a wired power source but instead is run off battery power, how will a low battery be identified?
- What maintenance will this system require?
- What is the expected lifespan of the system?
- What software is needed to manage this system?
 - Is the software cloud or web-based?
 - If not cloud or web-based, what are the requirements of the computer needed to manage the software?
- Will any software need to be updated in the future?
 - If so, how does that happen?
- How are residents added or removed in the system?
 - Does this require a technician, or can a local staff member easily execute this?
- Can the system hold user groups?
 - Can the system restrict certain access to certain hours? Example: Vendor access only work from 8 a.m. to 7 p.m.
- Will a user manual be provided?
- Is there a warranty for the system?
- Is there any ongoing technical support?
- Is the App free to download for residents?
 - Can the App be personalized if desired?

Access Control & Security Camera
Toolkit

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ACCESS CONTROL

Implementation

Installation Timing

Schedule installation while the members are on break, ideally summer break.

Code/Card Distribution or App Download

Communication Plan

- ☐ Resident Members
- ☐ Out-of-House Members
- ☐ Advisors
- ☐ Parents
- ☐ Staff



Training

- ☐ Resident Members
- ☐ Out-of-House Members
- ☐ Advisors
- ☐ Staff

Schedule Testing and Audits

Perform Operational Tests Monthly

Conduct Annual or Bi-Annual Audits of Equipment, Software and Hardware

SECURITY CAMERAS

Facility Assessment

Chapter Name _____

Institution _____

Address _____

Property Size _____ Sq. Ft.

Facility Size _____ Sq. Ft.

Occupancy _____

On-Site Staff ☐ Yes ☐ No



Access Control & Security Camera
Toolkit

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SECURITY CAMERAS

System & Usage Recommendations

Recommendation 1 | Develop Thorough Company Policy

—Recommended for all stand-alone facilities

Recommendation 2 | Exterior Cameras Whenever Possible, Interior Cameras Sparingly

—Recommended for all stand-alone facilities

Recommendation 3 | Quality & Quantity

—Secure the most cameras in the best quality that budget will allow

Recommendation 4 | Video Recording Storage & Access

—Remote Management & Cloud or Web-Based Access

—Limited Access Established by Company Policy



SECURITY CAMERAS

Monitored Areas

Desired Monitored Areas

- | | |
|---|---|
| <input type="checkbox"/> Exterior Facility Entry / Exit | <input type="checkbox"/> Interior Facility Entry / Exit |
| <input type="checkbox"/> Parking Lot | <input type="checkbox"/> North Elevation /Yard |
| <input type="checkbox"/> East Elevation /Yard | <input type="checkbox"/> South Elevation /Yard |
| <input type="checkbox"/> West Elevation /Yard | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Other _____ | |



SECURITY CAMERAS

Establishing Company Policy

Company Policy should include:

- Clearly define where cameras can and cannot be mounted and monitoring.
- Establish clear policy of sharing footage with police or campus officials.
- Establish a maximum and minimum limit recordings / footage will be saved.
- Establish a protocol for deleting footage outside of the limits.
- Determine which staff members have access to footage.
 - Clearly define situations footage is reviewed.
 - Clearly define who is allowed to view footage if a situation were to arise that would permit sharing footage.
 - Chapter Officers and Advisors
 - Establish protocol for how the footage is shared.
- Include any legal language necessary in Employee Handbook and/or Resident Member and Chapter Agreements.



Access Control & Security Camera
Toolkit

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SECURITY CAMERAS

Vendor Questions & System Requirements

- How many cameras will be needed to cover the desired monitored spaces / areas?
 - What is the video quality of the cameras being recommended?
- Will the cameras allow for slight overlap between cameras to ensure no “blind spots”?
- Will all cameras be able to be mounted out of reach of the standard person?
- Does the system require a power source?
 - If the system does require a power source, is there a battery backup?
 - If the system does not require a wired power source but instead is run off battery power, how will a low battery be identified?
- What maintenance will this system require?
- What is the expected lifespan of the system?
- What software is needed to manage this system?
 - Is the software cloud or web-based?
 - If not cloud or web-based, what are the requirements of the computer needed to manage the software?
- Will any software need to be updated in the future?
 - If so, how does that happen?
- Can the system be added on to in the future i.e. additional cameras?
- Will a user manual be provided?

SECURITY CAMERAS

Vendor Questions & System Requirements

- Is there a warranty for the system?
- Is there any ongoing technical support?
- Is the recording system cloud or web-based?
 - If yes, how is it accessed? Does it allow for multiple users?
 - If not cloud or web-based, what are the requirements of the computer needed to manage the software?
- What is the default time the system keeps recordings / footage?
 - Can that be manually adjusted?
- Features to avoid:
 - Moving Cameras
 - Interior Cameras whenever possible
 - Battery Powered Only System



SECURITY CAMERAS

Implementation

Installation Timing

Schedule installation while the members are on break, ideally summer break.

Communication Plan

- ☐ Resident Members
- ☐ Out-of-House Members
- ☐ Advisors
- ☐ Parents
- ☐ Staff

Training

- ☐ Staff

Schedule Testing and Audits

Conduct Monthly Audits of Equipment, Software and Hardware



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July 2020